

II. AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Currently Amended) A computer-implemented method for performing branched rollup for shared learning competencies in a learning environment, comprising:

providing a hierarchical tree corresponding to the learning environment, wherein the hierarchical tree includes a parent node, a first branch having a first child node and a first grandchild node, and a second branch having a second child node and a second grandchild node;

providing a learning competency in the learning environment that is shared by the first grandchild node and the second grandchild node;

performing an information rollup₁ using at least one [[a]] computer device₁ of the first child node upon a change in state of the learning competency, and performing an information rollup₂ using the least one [[a]] computer device₂ of the second child node after performing the information rollup of the first child node; wherein the information rollups include communicating a change in state of the learning competency to a node from which at least one of the first and second grandchild node depends;

generating a control block₃ using [[a]] the least one computer device₃ for each of the first child node, the second child node and the parent node prior to the first performing step, wherein the control block for the parent node indicates that the information rollup of the first child node and the information rollup of second child node must both be performed prior to performing the information rollup of the parent node;

performing an information rollup₂ using [[a]] the least one computer device₂ of the parent node only after performing the information rollup of the first child node and the information rollup of the second child node, eliminating repeated rollups of the parent node, and writing the hierarchical tree to a computer readable medium of [[a]] the at least one computing device after performing the information rollup of the parent node.

2. (Original) The computer-implemented method of claim 1, further comprising:

analyzing the hierarchical tree to identify the second grandchild node as sharing the learning competency with the second grandchild node; and

adding the second grandchild node to a list of nodes prior to performing the information rollup of the first child node.

3. (Original) The computer-implemented method of claim 2, further comprising consulting the list of nodes prior to performing the information rollup of the second child node.

4. (Canceled).

5. (Previously Presented) The method of claim 1, further comprising:

processing the control block for the first child node prior to performing the information rollup of the first child node;

processing the control block for the second child node prior to performing the information rollup of the second child node; and

processing the control block for the parent node prior to performing the information rollup of the parent node.

6-20. (Canceled).